



**STATE OF TENNESSEE  
TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION  
JOHNSON CITY ENVIRONMENTAL FIELD OFFICE  
2305 SILVERDALE ROAD  
JOHNSON CITY, TENNESSEE 37601-2162  
(423) 854-5400      STATEWIDE 1-888-891-8332      FAX (423) 854-5401**

June 19, 2015

The Honorable Tommy Casteel, Mayor  
Town of Baileyton  
6530 Horton Highway  
Greeneville, Tennessee 37745

**RE: Compliance Sampling Inspection (CSI)**  
Baileyton Wastewater Treatment Plant (WWTP)  
NPDES Permit No. TN0063932  
Greene County

Dear Mayor Casteel:

A Compliance Sampling Inspection (CSI) was conducted at the Baileyton WWTP by personnel from this Division on June 9-11, 2015. The Division thanks the Baileyton WWTP personnel for their time and assistance during the inspection. A copy of the ICIS Report is enclosed.

The inspection consisted of observations of sampling and the lab analytical tests at the WWTP. The inspection also included visual inspection of the WWTP, the pump stations, and the outfall line discharge to Lick Creek. Finally, the inspection included review of lab records from February-April 2015, discharge monitoring reports (DMR) and monthly operation reports (MOR) from March 2014-April 2015, and pump station logs from March 2014-June 2015.

Please be advised of the following:

1. The Town's NPDES permit average daily load effluent limits for total nitrogen (8.3 lb./day) and total phosphorus (1.7 lb./day) were exceeded for November 2014-April 2015. The total nitrogen result was 17.09 lb./day, and the total phosphorus result was 3.34 lb./day. Baileyton personnel indicated they are conducting a month long study on the aeration basins to prevent future exceedances.
2. Progress needs to be made on developing standard operating procedures for the lab analyses and on the demonstration of capability (DOCs) and method detection levels for the required analyses for all laboratory analysts. Demonstration of capability testing must be performed, and documentation maintained, for each laboratory analyst as required by the Town's NPDES permit, Part 1.3.3, page 7 and Title 40 CFR Part 136.7.

3. The thermometer for the E. coli incubator had a temperature reading of 37 degrees Celsius during the inspection. Per the HACH Method 10029, the E. coli sample has to be incubated at a temperature of  $35 \pm 0.5$  degrees C for 24 hours. Per the Town's NPDES permit, Part 1.3.3, page 7, and Part 2.1.4, page 11, adequate laboratory and process controls must be used.
4. The Town's NPDES permit, Part 1.3.4, page 7, requires that the following information be recorded:
  - a. The sample collection time for the influent and effluent composite samples when the total suspended solids are analyzed. The BOD sample collection times are being recorded. The temperature of the composite samplers also needs to be recorded.
  - b. The date the E. coli analysis is completed, and the E. coli dilutions used.
  - c. The present location of the effluent grab sample.
  - d. The BOD method and the correct E. coli method on the lab sheets.
  - e. The times the TSS filter pads are weighed and dried to document the one hour required drying time per Standard Method 2540(D)-Total Suspended Solids.
  - f. The sheet on which the dissolved oxygen measurements are recorded.
5. The Town's NPDES permit, Part 1.3.1, page 6, requires flow measurement devices be selected, installed, calibrated, and maintained in order to ensure accurate flow measurements with a maximum deviation of less than  $\pm 10\%$  of true flow rate throughout the expected range of flows. The inspection revealed the following:
  - Per a review of the MORS from March 2014-April 2015, the effluent and influent flows indicate that the effluent and influent flow measurements have had a deviation of more than 10% for several days. For the period of December-April 2015, the deviation occurred on a few days.
6. Per the Town's NPDES permit, Part 3.6, page 23, the inspector's initials and time of inspection shall be recorded on the pump station inspection log sheets. This information was recorded on half of the pump station log sheets for March 2014-June 2015. Also, the log sheet needs to be updated with all of the pump station names and locations.
7. The Town's NPDES permit, Part 2.1.4, page 11, requires that the permittee shall at all times properly operate and maintain all facilities and systems (and related appurtenances) for collection and treatment which are installed or used by the permit to achieve compliance with the terms and conditions of this permit. The inspection revealed the following:

- a. The UV control panel's readout was not working. We acknowledge that a new control panel has been ordered.
  - b. The influent pump station's audible alarm did not work.
  - c. The effluent pump station's visual and audible alarm did not work.
  - d. Pump Stations No. 1, 3, and 5 needs to have the vent caps replaced. Pump Station No. 9 did not have a vent.
  - e. In Pump Station No. 1, pump no. 1's discharge line had a pinhole leak, and pump no. 2 was inoperable due to a faulty electrical contactor.
8. The November 2014 and April 2015 MORs were received in the JCEFO several days after the 15<sup>th</sup> day of the month following data collection. Per the Town's NPDES permit, Part 1.4.4, page 9, the reports shall be submitted by the 15<sup>th</sup> day of the month following data collection. Correspondence, dated December 18, 2014 and May 19, 2015, from the Town indicated that receiving the Total Nitrogen and Total Phosphorus results from the contract lab in an untimely manner caused the late submittal of these MORs.
9. The March 4, 2015 influent and effluent BOD results reported on the March 2015 MOR were the original sample results and not the average of the original and duplicate sample results. Please submit a corrected copy of the MOR to this Environmental Field Office (EFO).

**A written plan to address the above comments needs to be submitted to this Environmental Field Office (EFO) within 15 days of receipt of this correspondence.**

#### **Additional Comments**

The following comments/observations were noted:

10. The effluent on June 9 and 10, 2015 was observed to have a tan tint.
11. New rotary screens were observed in operation before the influent Pharshall flume. Staff gauges have been installed at the influent and effluent flow meters.
12. The digester diffusers are planned to be replaced.
13. Sludge was observed on the drying beds. The belt filter press has not been in operation. Per the April 2015 MOR, sludge was applied to the WWTP's land application site. The WWTP has obtained a pumper truck that is used to apply sludge.
14. Spare pumps were observed at the WWTP for collection system and residence pump stations. Maintaining an inventory of spare pumps will continue to help prevent future overflows in the collection system.
15. Emergency contact information signs for the pump stations have been ordered per Baileyton personnel.

16. The WWTP lab has a new autoclave.
17. It is recommended to record the dates lab chemicals are received and opened.

**Additional Information**

The following information needs to be submitted to this EFO within 15 days of receipt of this correspondence:

- Lab analytical results for samples collected on June 9-11, 2015.

Results from samples collected by Division personnel during the CSI will be forwarded when they are available.

We understand that sludge is presently being land applied. Please be advised that if the sludge handling practice changes, this EFO must be notified.

We would like to thank the Baileyton WWTP personnel for their time and assistance during the inspection. If you have any questions concerning this correspondence, you may contact me at 423/854-5452 or via e-mail at [Sandra.Vance@tn.gov](mailto:Sandra.Vance@tn.gov).

Sincerely,



Sandra K. Vance  
Division of Water Resources  
Johnson City Environmental Field Office

SKV/150215167

Enclosures

cc: Mr. Danny Neely, Operator, Baileyton WWTP, (via e-mail-dannyneely550@yahoo.com)  
Ms. Maybelle Sparks, Water-Based Systems, DWR, Nashville (via e-mail-Maybelle.Sparks@tn.gov)  
Mr. Donovan Mulvaney, Compliance and Enforcement Section, DWR, Nashville (via e-mail-Donovin.Mulvaney@tn.gov)



TDEC - Division of Water Resources  
Johnson City Field Office

ICIS NPDES Facilities Inspection Report

Facility Data

NPDES ID:	TN0063932	Facility Site Name	Baileyton STP		
		Address	60 Boulder Loop, Greeneville, TN 37745		
Permit Eff. Date:	Feb 1, 2011	Permit Exp Date:	Dec 31, 2015	SIC Code:	4952

Compliance Monitoring Information

Compliance Monitoring Activity Name	Compliance Sampling Inspection (CSI)				
	* If Bio Monitoring is selected above, select the method used:				
Compliance Monitoring Activity	Sampling				

Compliance Monitoring Dates/Times

Entry Date/Time (mm/dd/yyyy hh:mm):	06/09/2015 9:15	Exit Date/Time (mm/dd/yyyy hh:mm):	06/11/2015 12:45
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Facility Representatives

Danny Neely, Operator, 423-234-0991	Tommy Casteel, Mayor, 423-234-6911
On-Site Representative(s) Title, Phone Number	Responsible Official(s), Title, Phone Number

Statute and Section Information

Federal Statute:	CWA - Clean Water Act	State Statute:	Tennessee Water Quality Control Act
Programs:	NPDES- Base Program (Limits, Reporting, & Schedule)		

Compliance Monitoring Reason: Core Program

Compliance Monitoring Agency Type:	State	Agency Name:	TDEC - DWR
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Did EPA assist/ Inspection?	No	Time Physically conducting activity: Days:	3	Hours:	
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Inspection Type:	State	Compliance Monitoring Action Outcome:	
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Lead Agency:		Compliance Monitoring Rating Code:	Unrated
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If Joint Inspection, what was the purpose of the other party?	
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Areas Evaluated During Inspection (Check only those areas evaluated)

<input checked="" type="checkbox"/> Permit	<input checked="" type="checkbox"/> Self - Compliance Program	<input type="checkbox"/> Pretreatment
<input checked="" type="checkbox"/> Records / Records	<input type="checkbox"/> Compliance Schedule	<input type="checkbox"/> Pollution Prevention
<input checked="" type="checkbox"/> Facility Site Review	<input checked="" type="checkbox"/> Laboratory	<input type="checkbox"/> Storm Water
<input checked="" type="checkbox"/> Effluent / Receiving Waters	<input checked="" type="checkbox"/> Operations & Maintenance	<input type="checkbox"/> Combined Sewer Overflow
<input checked="" type="checkbox"/> Flow Measurement	<input checked="" type="checkbox"/> Sludge Handling / Disposal	<input checked="" type="checkbox"/> Sanitary Sewer Overflow

Compliance Monitoring Summary

See letter.
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EPA and State Representatives

	TDEC/DWR/JCEFO/423-	6/19/2015
Inspector's Signature	Agency / Office / Phone 854-5452	Date
	TDEC/DWR/JCEFO/423-854-5462	6/19/2015
Manager's Signature	Agency / Office / Phone	Date

(Note: This form can only be printed to an XPS document, then saved for later use.)